

AMENDMENTS TO THE CLAIMS

1. Cancelled.

2. (Currently amended) Mixer according to Claim 24 4, wherein said guide plate deposition surface takes up approximately 20% to approximately 40%, preferably approximately 30%, of the angular range around the rotating axis.

3. Cancelled.

4. (Currently amended) ~~Mixer according to claim 21,~~ A feed mixer comprising:
a mixing chamber having a bottom and a discharge opening for a mix;
a mixing screw in the mixing chamber and driven about a vertical rotational axis, the mixing screw including at least one flight that has a leading edge arranged adjacent to the chamber bottom, and the flight being dimensioned to have its greatest distance to the rotational axis at the leading edge, and tapers upwardly, and
a rotary driven device for smoothing the discharge of the mix in the lower section of the mixing screw assigned to the discharge opening, the device containing at least two guide plates equally spaced around the rotational axis to increase the action of the centrifugal force in the mix;
each guide plate having a leading take-up edge, a trailing edge, and an upwardly facing deposition surface for the mix having a radially outer boundary with a circumferential length and a distance to the rotational axis;
the trailing edge of one of the guide plates is fixedly attached to the leading edge of the flight;
wherein the distance of the boundary of each deposition surface to the rotational axis is essentially equal along its circumferential length in rotating direction, and is greater than the greatest distance of the flight to the rotational axis; and
wherein said guide plate deposition surface comprises a greater width in the direction of rotation in an outer region radially with regard to said rotational axis than in a radially inner region.

5. (Previously presented) Mixer according to claim 4, wherein said guide plate deposition surface comprises a shape similar to a circular sector or cake slice.
6. (Currently amended) Mixer according to claim ~~21~~ 4, wherein said leading take-up edge of said guide plate comprises a radially outer section and a radially inner section, said radially outer section is arranged trailing compared to said radially inner section in the direction of rotation.
7. (Previously presented) Mixer according to Claim 6, wherein said take-up edge runs substantially tangential to said rotational axis.
8. (Currently amended) Mixer according to claim ~~21~~ 4, wherein said deposition surface runs at a downward pitch angle relative to said vertical rotational axis.
9. (Currently amended) Mixer according to claim ~~21~~ 4, wherein said guide plate deposition surface is flat and generally transverse to said vertical rotational axis.
- 10.-13. Cancelled
14. (Currently amended) Mixer according to claim ~~21~~ 4, wherein ~~the mixing screw comprises a said mixing screw flight with which~~ has the diameter of the lowermost winding compared to the diameter of the second lowermost winding narrows more than the diameter of the second lowermost winding compared to the diameter of the winding following the second lowermost winding.
- 15.-21. Cancelled.
22. (Previously presented) A feed mixer comprising:
a mixing chamber, which is provided with a bottom and a discharge opening for a mix;

a mixing screw accommodated in the mixing chamber and driven about a vertical rotational axis, the mixing screw including at least one flight, the flight includes a leading edge arranged adjacent the bottom, and the flight being dimensioned to have its greatest distance to the rotational axis at the leading edge, and tapered upwardly; and

a rotary driven device for smoothing the discharge of the mix which is provided in the lower section of the mixing screw assigned to the discharge opening, the device containing at least two guide plates equally spaced around the rotational axis to increase the action of the centrifugal force on the mix;

each guide plate includes a leading take-up edge, a trailing edge, and an upwardly facing deposition surface for the mix having a radially outer boundary with a circumferential length and a distance to the rotational axis;

the trailing edge of one of the guide plates is arranged at a vertical distance above and a horizontal distance to the leading take-up edge of the flight;

wherein the distance or the boundary of each deposition surface to the rotational axis is essentially equal along its circumferential length in rotating direction, and is greater than the greatest distance of the flight to the rotational axis.

23. (Previously presented) Mixer according to Claim 22, wherein said guide plate deposition surface takes up approximately 20% to approximately 40%, preferably approximately 30%, of the angular range around the rotational axis.

24. (Previously presented) Mixer according to claim 22, wherein said guide plate deposition surface comprises a greater width in the direction of rotation in an outer region radially with regard to said rotational axis than in a radially inner region.

25. (Previously presented) Mixer according to claim 24, wherein said guide plate deposition surface comprises a shape similar to a circular sector or cake slice.

26. (Previously presented) Mixer according to claim 22, wherein said leading take-up edge of said guide plate comprises a radially outer section and a radially inner section, said radially outer section is arranged trailing compared to said radially inner section in the direction of rotation.
27. (Currently amended) Mixer according to Claim ~~27~~ 22, wherein said leading take-up edge of said guide plate runs substantially tangential to said rotational axis.
28. (Currently amended) Mixer according to claim 22, wherein said deposition surface runs at a downward pitch ~~angle~~ relative to said vertical rotational axis.
29. (Previously presented) Mixer according to claim 22, wherein said guide plate deposition surface is flat and generally transverse to said vertical rotational axis.
30. (Currently amended) Mixer according to claim 22, wherein a trailing edge of ~~the~~ one of said guide plate plates is arranged at a vertical distance above and a horizontal distance in front of the leading take-up edge of the flight of the mixing screw.
31. (Currently amended) Mixer according to claim 22, wherein a trailing edge of ~~the~~ one of said guide plate plates is arranged at a vertical distance (~~v~~) above the leading take-up edge of the mixing screw and is overlapping the leading take-up edge with a horizontal distance (~~h~~).
32. (Previously presented) Mixer according to claim 22, wherein the mixing screw comprises a flight with which the diameter of the lowermost winding compared to the diameter of the second lowermost winding narrows more than the diameter of the second lowermost winding compared to the diameter of the winding following the second lowermost winding.